ADDITIONAL NEW SPECIES OF WEST AMERICAN COLEOPTERA

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FAMILY BUPRESTIDAE

Acmaeodera linsleyi Van Dyke, new species

Elongate, subcylindrical, of moderate size; bronzed, the head, pronotum and underside with a greenish tinge, the elytra a bit brownish; head and pronotum somewhat densely clothed with fine, long, fulvous pile, elytra less dense but similarly clothed and the underside moderately clothed with gray, more or less inclined pubescence; the prothorax generally immaculate though often with a small, yellow spot at the sides behind the middle, the elytra with yellow markings of a somewhat stable type as follows: a small spot at the side below the humeral umbone; an oblique band behind the umbone, reaching the third interval where generally expanded both in front and behind and outwardly reaching the margin and continued backwards for a short distance; a second and broad transverse or slightly oblique patch at the middle, reaching from the margin to about the third or fourth interval; a narrower oblique bar between the above and the apex, touching the margin but not the suture, and generally a small spot on the margin in front of it which is sometimes united with it; and a subapical lunate spot, often united along the margin with the preceding or sometimes interrupted. Head coarsely, approximately punctured, feebly longitudinally impressed at middle and transversely impressed at base of clypeus; the antennae reaching middle of prothorax, segments 5-11 serrate. Prothorax almost twice as broad as long, somewhat wider than elytra, apical margin biemarginate, the median lobe quite evident, sides arcuate or subangulate, the margin narrow, not reflexed and scarcely visible posteriorly, as seen from above, the base transverse; the disk rather coarsely, closely, often approximately punctured, the median longitudinal impression well marked and the oblique impressions within the hind angles also quite evident. Elytra about twice as long as broad, sides almost parallel or feebly sinuate from base to behind the middle, thence narrowed to apex; the disk with triangular depression at middle of base, the humeral umbone quite prominent, a small impression just within, the striae shallowly impressed and moderately coarsely, rather deeply and closely punctured, intervals flattened at center, feebly convex at sides and the third sometimes elevated and carinated at base. Beneath, coarsely, densely punctured in front, more finely, less densely punctured on ventral plates. Prosternum broadly, feebly, sinuate on anterior margin.

Last ventral with thin somewhat transverse ventral plate. Length, 6.5-9 mm.; breadth, 2.5-3.5 mm.; average, 8 mm. long by 3 mm. wide.

Holotype (No. 5336, Mus. C. A. S. Ent.) and numerous designated paratypes from a series of over one hundred specimens, collected by E. G. Linsley, E. S. Ross and other at Pinon Flat, San Jacinto Mountains, Riverside County, California, on various days during May, 1939.

This species belongs in the Acmaeodera sinuatae group, although the sinuation of the anterior margin of the prosternum is feeble. According to Fall's key, this species would run close to convicta Fall but it bears no close resemblance to that or any other member of that group except possibly some specimens of hepburni Lec. It is in general more cylindrical, has the prothorax always slightly broader than elytra, and the elytral markings, more sharply outlined, generally somewhat transverse, and suggesting to a certain degree the markings of flavostica Horn. Most of the specimens were collected from the blossoms of the salmon colored Sphaeralcea fendleri var. californica Parish. It is apparently quite local in distribution.

Acmaeodera moronga Van Dyke, new species

Moderately long, robust, cuneiform, of medium size; bronzed and shining, the elytra black or bluish-black; head, and pronotum somewhat densely clothed with fine, long pile, that of the head in great part gray, that of the pronotum fulvous as is also the much sparser erect pile of the elytra, the underside clothed with long gray, much inclined pile, denser at the sides; the prothorax with a lateral yellow patch extending from near the base generally to about the middle, the elytra with the yellow markings about as follows: a narrow yellow marginal line extending from base almost to the median yellow bar, in a few cases not reaching base, a narrow oblique bar behind the humeral umbone, generally connected with the marginal line and expanded inwards, a broad median band, oblique or even arcuate forwards, sometimes united with the anterior band and often with the terminal portion separated as a spot, a short almost transverse bar between median and subapical bar, often broken or even bifurcated at the margin, and the subapical lunate marking, often broken up into two or three spots. Head moderately, coarsely, closely punctured, rather deeply, longitudinally impressed at middle, often with a smooth area at bottom of groove, transversely impressed at base of clypeus; the antennae about reaching middle of prothorax, segments 5-11 broadly serrate. Prothorax over twice as broad as long, broadest

at base, apical margin biemarginate, sides arcuate, gradually narrowed apically, the margin narrow and not visible posteriorly from above; the disk rather coarsely and densely punctured, approximate at sides, the median longitudinal impression well marked, deeply and triangularly impressed at base, and the oblique impressions within hind angles quite evident. Elytra twice as long as broad, sides feebly sinuate before the middle, gradually narrowed from base to posterior third, thence more acutely convergent to apex; the disk with a well-marked triangular depression at middle of base, the humeral umbone prominent, a slight groove at inner side, the striae moderately impressed, rather coarsely, not closely punctured fully their own width apart except near suture and in basal triangle, intervals somewhat flattened inwardly, convex at sides, and minutely, irregularly punctured, the third somewhat elevated and carinated near base. Beneath, rather coarsely, closely punctured in front, finely and sparsely on posterior ventral plates. Prosternum broadly sinuate in front. Last ventral plate with a broad yet feebly developed ventral plate. Length, 10 mm.; breadth, 4 mm.; several specimens but 8 mm long.

Holotype (No. 5337, Mus. C. A. S. Ent.) and five paratypes collected by myself in Moronga Valley, Riverside County, California, May 24, 1941, and various other dates close to that period.

This species, according to the key, would follow serena Fall, which it does not at all resemble. It has the general markings of flavostica Horn even to a greater degree than linsleyi, but differs by having the elytra black or bluish-black, by being less acuminate, less coarsely and more discretely punctured, with the pubescence sparser, as well as by having a different type of prosternal margin. From some specimens of hepburni Lec., it differs by being stockier, less elongate, by the coloration of elytra and less concentration of yellow toward the base.

FAMILY SCARABAEIDAE

Polyphylla peninsularis Van Dyke, new species

Rather short and stocky, brown, the prothorax generally quite rufous, the palpi, antennae and legs rufous, the head and pronotum clothed with long, silky, erect, light brown pile; the elytra with the usual sutural, two discal and submarginal white stripes formed by the densely placed white scales, the stripes narrowing posteriorly, with irregular margins and often somewhat interrupted, the humeral stripe a short line at most, and the areas between the stripes peppered with short, light yellowish scales. Head with rather coarse and shallow punctures; clypeus with reflexed

margins, the sides straight and parallel or slightly diverging forwards, the front margin transverse or very feebly biemarginate at most and with outer angles hardly rounded; the antennae with a club that is about 6 mm long, 2 mm longer than head, the outer lamellae decidedly curved and distally averaging 1.5 mm, in width; the terminal segment of labial palpi at least three times as long as broad. Prothorax convex as usual, apical margin emarginate, the sides subangulate, the lateral margin entire or feebly crenulate posteriorly at most, the hind margin broadly lobed; the disk coarsely, shallowly, irregularly punctured, with the usual three scaly vittae, the median complete, the two lateral incomplete in front, the rest of the surface with scattered scales and the long, erect hair, generally longer and denser in front. Elytra over onethird longer than wide, with the surface irregularly, shallowly punctured, rugose and somewhat shining where not covered with scales, the apices broadly rounded and the sutural angles quite obtuse. Pygidium parabolic in shape, with narrow, reflexed margins and rather densely clothed with short, yellowish hair and white scales that are about twice as long as broad. Foretibiae bidentate in the male, the female not seen. Length, 23 mm.; breadth, 11 mm.

Holotype male (No. 5338, Mus. C. A. S. Ent.) and seven paratype males, collected at La Grulla, 7000 feet alt., in the San Pedro Martir Mountains of Baja California, June 19, 1923, by J. R. Slevin.

This rather small and interesting Polyphylla belongs in the group characterized by the long pile on the pronotum. According to Casey's key (Mem. Coleopt., V, 1914, pp. 322-353), this species would run close to diffracta Casey (fuscula Fall), which is of about the same size and general appearance but differs from diffracta by being a bit broader, by having the silky pile of the head and pronotum much denser, longer and finer, by having the last labial palpal segment, a bit narrower, the outer angles of the clypeus less acutely angulate, the antennal club about 1 mm. longer, the lateral margins of the prothorax behind not conspicuously crenulate as they are in diffracta, the sutural angles of the elytra obtuse, not sharply right angled, the pile of the legs long and silky, not rather short and stiff, and the pygidium less acute and angulate. This species appears to be even more closely related to the recently described barbata Cazier, which is somewhat shorter, with the long pile of the pronotum as dense behind as anteriorly, with the clypeus more expanded in front and its angles more rounded, and the scales of both elytra and pygidium longer and narrower, more hair-like.

Thyce aurata Van Dyke, new species

Short and robust, rufous, the scutellum and elytra densely clothed with small, golden brown scales, the head and pronotum also with numerous scales of similar nature and in addition ornamented with rather long erect pile. Head rather finely, closely punctured; clypeus expanded in front, with reflexed margins, transverse apical margin and narrowly rounded outer angles; the antennae with club about as long as funicle and the terminal segment of labial palpi, as long as antennal club, elliptical in shape and with a deep sulcus on upper face running the entire length yet somewhat more widely expanded basally. Prothorax convex, apex emarginate, sides subangulate with margin feebly crenulate posteriorly, the base broadly arcuate; disk finely, closely punctured and with median longitudinal impression feeble. Elytra over one-fourth longer than broad, with the surface finely, closely punctured like the pronotum, and the sutural angles right angled. Pygidium with lateral margins slightly reflexed in front, the surface finely closely punctured and densely clothed with scales that are somewhat longer and narrower than those of the elytra. Beneath the forebody densely clothed with long, light brown pile, the abdomen rather finely punctured and quite well covered with scales which are quite similar to those of the pygidium. First tibiae with the middle and apical teeth well developed, the basal a broad tubercle; the middle tibiae with two short yet well-marked spines on the outer face. Each tarsal claw with a small, erect tooth near its base. Length, 20 mm.; breadth, 9 mm.

Holotype male (No. 5339, Mus. C. A. S. Ent.) and one male paratype, collected at SAN DIEGO, CALIFORNIA, by Dr. F. E. Blaisdell. Associated with these two specimens is a large female, also collected by Dr. Blaisdell which I presume is the female of this species. It is 24 mm. long by 11 mm. broad, almost naked above, the head, pronotum and scutellum sparsely clothed with suberect, fulvous pile, the elytra with only a few minute fulvous scales scattered over the elytral declivity and carried over onto the pygidium. The head is densely, cribately punctured, with a prominent frontal tubercle, the clypeus quite similar to that of the male but with the margins more reflexed and the outer angles more rounded; the antennal club hardly two-thirds as long as the male club and the last labial palpal segment narrow and about half the length of that of the male. The pronotum is densely, coarsely punctured, with a small, smooth area at center and the side margins behind strongly crenulated. Beneath, the forebody, rather densely clothed with long, fulvous pile, the abdomen quite smooth and sparsely peppered with very small,

hair-like, yellowish scales. Front tibiae distinctly tridentate, the middle tibiae with a pronounced tubercle at middle and a small spine above, on outer face.

This species in Casey's key would run somewhat near fossiger Csy. but it is much shorter, has an entirely different type of vestiture and is quite different structurally in many regards. What I take to be the female is also much more like the female of blaisdelli Csy. than that of fossiger Csy. The subspecies ochreata Csy. of fossiger approaches aurata as regards the color but the scales are less dense and of a different type.

Thyce cinerea Van Dyke, new species

Rather small, reddish brown, the head and pronotum darker, also densely clothed with long, erect, silky, very light yellowish gray pile, and addition with a covering of closely applied long, white, hairlike scales, rather dense on the head, sparser on the pronotum where most evident as a broken, median longitudinal vitta, and dispersed patch at the sides; the scutellum densely clothed with somewhat larger white scales and the elytra clothed with white, hairlike scales, somewhat like those of the head and pronotum, which though closely applied are not approximate, thus do not conceal the surface of the elytra. Head rather coarsely, densely punctured; clypeus moderately expanded in front, with margins well reflexed, the front margin broadly emarginate and the outer angles well rounded; the antennae with club about as long as funicle, and the terminal segment of labial palpi but slightly shorter, somewhat elliptical in shape and with a deep, rather wide groove on the upper side running the entire length. Prothorax convex, apex feebly biemargainate, sides arcuate or feebly subangulate, the outer angle broadly rounded, the margin strongly crenulate behind, the base with prominent median lobe; disk with moderately coarse, rather closely placed variolate punctures, without defined median impression. Elytra over one-fourth longer than broad, the surface rather finely, closely punctured, the apex feebly truncate and the sutural angles right angled. Pygidium subangulate, with narrow, feebly reflexed margins, and punctured and clothed like the elytra. Beneath, the forebody densely clothed with the long, silky, light yellowish gray pile, the abdomen rather densely, finely punctured and moderately closely covered with long, hairlike white scales. Front tibiae with the upper tooth very obtuse and low, the middle and terminal, acute and promnient; the middle tibiae with the spines very small, barely indicated. Tarsal claws with basal tooth small and acute. Length, 19 mm.; breadth, 9 mm.

Holotype male (No. 5340, Mus. C. A. S. Ent.), a unique col-

lected at Balboa, California, in July by Dr. Harold Bryant and by him kindly presented to me.

This rather small species because of its silvery gray color stands well apart from its fellows. It is evidently a sand dune species like *pistoria* and others, but these are more robust in every regard and clothed with fulvous or yellowish scales and pile.

Thyce clypeata Van Dyke, new species

Of moderate size, robust, brown or reddish-brown, the head and pronotum clothed with fine, erect, rather long fulvous pile and in addition with closely appressed, elongate, yellowish scales, dense on the head, less dense on the pronotum, though rather concentrated in the form of a median longitudinal vitta and a broader, less sharply defined vitta on either side, the scutellum densely clothed with somewhat broader white scales, and the elytra rather uniformly, moderately closely clothed with small, elongate, very light fulvous scales, the vestiture thus only slightly concealing the surface beneath. Head rather closely punctured; clypeus expanded in front, the sides notched or sinuate in front of the lateral angles, the anterior margin feebly emarginate at middle, the margins well reflexed and the anterior angles though blunt, decidedly angulate; the antennae with club fully as long as the funicle, the last labial palpal segment two-thirds as long as antennal club, rather wide and with a moderately wide and deep groove extending the entire length along the upper surface. Prothorax convex, apex feebly biemarginate, sides subangulate, feebly crenulated behind, the base broadly subangulately lobed; the disk rather coarsely, densely punctured, the median longitudinal impression shallow but evident. Elytra less than a third longer than broad, the surface finely, closely punctured, the apex broadly rounded, subtruncate, with sutural angles slightly obtuse. Pygidium subangulate, with feebly reflexed margins, finely, closely, punctured, and moderately densely clothed with narrow, very light colored hairlike scales, much narrower and longer than those of elytra. Beneath, the forebody densely clothed with long, fine, light grayish yellow pile, the abdomen rather finely, densely punctured and clothed with closely adherent long, white hairlike scales. Front tibiae tridentate, the upper tooth broad yet prominent; the middle and hind tibiae both with two well-marked spines on outer margin; middle tarsi longer tahn tibiae. Tarsal claws each with an acute and prominent tooth near base. Length, 23 mm.; breadth, 11 mm.

Holotype male (No. 5341, Mus. C. A. S. Ent.) and two paratype males, collected near Petaluma, California, by E. C. Johnston. Two of the specimens are alike and normal, the third has the fore tibiae with the spines all much reduced, the outer margin merely sinuate.

Superficially this northern species looks more like some of the southern species as for instance fossiger, which it superficially simulates though is larger and more robust, than it resembles species like harfordi or others from the north. Its most distinctive character is its clypeus, with lateral margin sinuate before apex and the angles more prominently angulated as a result.

FAMILY CURCULIONIDAE

Pandeleteius viridissimus Van Dyke, new species

Of rather large size for the genus, black, antennae and tarsi rufous, the entire upper and under surface covered with brilliant, circular, green scales. Head medianly sulcate in front, beak short, 1 mm. long, triangularly emarginate at apex, eyes moderately convex, antennae about reaching middle of prothorax, with a fine, sparse pubescence, first segment of funicle stout, almost as long as the second and third segments combined. Prothorax about onefifth broader than long, apex and base transverse, sides broadly rounded at middle, sinuate in front and behind; disk feebly convex, with well defined anterior and posterior submarginal impressions, and with a few fine obliquely placed hairs as on the head. Elytra transverse at base, sides almost straight, gradually wider to posterior third then rounded to somewhat projecting and acute apex; disk moderately convex, somewhat bulbous laterally behind, the striae complete and finely impressed, the intervals flat and with a single row of fine short and sparse, upright hairs, most evident on the posterior declivity. Beneath with abdomen finely, sparsely pilose and with first ventral suture moderately arcuate at middle. Anterior femora enlarged, fusiform, the tibiae long and strongly denate within. Length, 9 mm.; breadth, 4 mm.

Holotype (No. 5342, Mus. C. A. S. Ent.) and one paratype, collected by myself on the western slope of Montezuma Pass, Huachuca Mountains, Arizona, August 19, 1940. They were apparently feeding on the foliage of *Calliandra eriophylla* Benth., an accacia-like plant wth pink flowers.

This brilliant green species, of rather large size, should be readily separated from its more somber relatives. Some of the scales are apt to be rubbed off, exposing the black epidermis and thus giving the insects the appearance of being peppered.